Research on the Construction of Digital Literacy Education Model for Elderly in Wisdom Communities Under the Context of Lifelong Education

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ABSTRACT

In response to the numerous pressing issues in the field of digital literacy education for the elderly under the context of lifelong education, this study starts with an analysis of the current situation. It proposes the construction of a digital literacy education model for the elderly in wisdom communities, discussing the background, value implications, strategic measures, and future prospects.

Keywords: Lifelong education, Digital literacy education for the elderly, Wisdom community construction.

1. INTRODUCTION: BACKGROUND

In the report of the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping first proposed "promoting digitalization in education." The report explicitly states the implementation of a proactive national strategy to address population aging, and the "Action Plan for Improving Scientific Literacy of the Whole Population (2021-2035)" highlights the importance of popularizing and enhancing digital literacy and skills for all. The "14th Five-Year Plan for Healthy Aging" and the "14th Five-Year Plan for the Development of the National Aging Industry and Elderly Care Service System" both involve enhancing the sense of achievement, happiness, and security of the elderly through community education, enabling them to enjoy their later years, continue learning, and contribute actively.

Lifelong education refers to the sum of various forms of cultivation that individuals receive throughout their lives. As the main focus of elderly education, the construction of digital literacy education for the elderly in wisdom communities serves as a social carrier and educational foundation for building a lifelong learning system and a learning society for all. Strengthening research on

digital literacy education for the elderly in wisdom communities under the context of lifelong education is a critical aspect of implementing the spirit and strategic deployment of relevant policies and regulations such as the "Law on the Protection of the Rights and Interests of the Elderly in the People's Republic of China," the "Medium and Long-Term Plan for Active Response to Population Aging," the "Opinions of the CPC Central Committee and the State Council on Strengthening Work for the Elderly in the New Era," and other related documents.

The research on the construction of a digital literacy education model for the elderly in wisdom communities under the context of lifelong education is proposed based on the above background.

2. CURRENT SITUATION ANALYSIS

With the rapid increase in China's elderly population and the advancement of digitalization processes, digital literacy education for the elderly has become a focal point of contemporary society. The Chinese government's attention to wisdom community construction and digital literacy education for the elderly is growing, as digitization

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is reshaping and profoundly changing the lifestyle and learning methods of the elderly, leading to an increased sense of fulfillment among this demographic. However, at the same time, there are issues such as the digital divide that need to be addressed. Digital literacy education for the elderly refers to their ability and competence in mastering and utilizing digital technologies, including skills in accessing, understanding, analyzing, applying, evaluating, and creating digital information. It serves as a crucial pathway for the elderly to integrate into wisdom communities and engage in meaningful activities. Wisdom communities refer to communities that fully utilize information technology to provide residents with safe, comfortable, convenient, and efficient living environments and services. The development of wisdom communities relies on the support of digital literacy education for the elderly. Under the context of lifelong education, there is an urgent need to enhance the digital literacy of the elderly in order to achieve high-quality development construction of wisdom communities.

The construction of wisdom communities and digital literacy education for the elderly are new research hotspots in academia. Gu Jilu and Wang Haiyan (2020) proposed issues and strategies for community-based health education for the elderly, while Zhao Zezhong (2022) suggested enhancing digital literacy and implementing "smart elderly care." Zhou Junying (2023) proposed leveraging the digital intelligence of older adults for community governance. However, a search using keywords such as "lifelong education," "wisdom community construction," and "digital literacy education for the elderly" on the China National Knowledge Infrastructure (CNKI) reveals limited relevant research.

Therefore, further exploration is needed on how to enhance digital literacy education for the elderly through the construction of wisdom communities under the context of lifelong education. This study aims to provide a fresh perspective and develop a more profound, detailed, refined, and strengthened research plan.

3. VALUE IMPLICATIONS

The value implications of constructing a digital literacy education model for the elderly in wisdom communities under the context of lifelong education are reflected in the following aspects:

Firstly, it is crucial to establish a strong theoretical foundation and provide practical references for the promotion of digital literacy education among the elderly in wisdom communities. The development of digital literacy education for the elderly in wisdom communities is centered around meeting the growing needs of the elderly for a better life. The alignment of theory and practice is essential to achieve a balance that addresses the concerns and needs of digital literacy education for the elderly in wisdom communities. It is also crucial for mitigating the challenges posed by population aging and achieving social harmony and stability.

Secondly, it is beneficial to develop digital literacy education for the elderly in wisdom communities to enhance their sense of fulfillment and happiness. Integrating learning, leisure, and meaningful contributions for the elderly provides them with more opportunities for personal development and fulfills their aspirations for a better life. Therefore, as a component of lifelong education, digital literacy education for the elderly in wisdom communities is undoubtedly a necessary pathway for the elderly to achieve a fulfilling and meaningful life, and to elevate their personal values.

Thirdly, it is essential to promote the improvement of the lifelong education system through the advancement of digital literacy education for the elderly in wisdom communities. The digital literacy education for the elderly in wisdom communities eliminates the limitations of rigid traditional educational methods and adheres to educational principles that closely integrate with real-life situations, focus on enhancing understanding, absorption, and application abilities, and ensure that educational plans and methods are tailored to specific requirements and innovative goals of each society. It plays a functional role in constructing the highest level of the lifelong education system and highlights the significance of lifelong education principles, thus promoting the improvement of the overall structure of the lifelong education system.

In summary, the value implications of the highquality development of digital literacy education for the elderly in wisdom communities include enhancing their sense of fulfillment and happiness, as well as promoting the improvement of the overall structure of the lifelong education system.

4. DILEMMA ANALYSIS

First, the development of digital literacy education for the elderly in wisdom communities within the lifelong education system faces challenges of inadequate progress. Firstly, there is insufficient supply of digital literacy education for the elderly in wisdom communities. As a serviceoriented social welfare initiative, digital literacy education for the elderly in wisdom communities lacks mandatory indicators and is often detached from the overall elderly community services. This leads to inadequate investment in educational resources for the elderly in communities, resulting in a mismatch between the diverse learning needs of the elderly population and the available resources. Secondly, there is a lack of participation from social forces in promoting digital literacy education for the elderly in wisdom communities. China has abundant educational resources across various levels of schools, cultural departments, and social organizations. However, due to the lack of effective communication channels within the lifelong education system, these social educational forces are unable to effectively contribute to the development of digital literacy education for the elderly. Thirdly, the utilization rate of existing resources by elderly residents in the community is not optimal. Individual awareness of lifelong learning is weak, and collaboration among different communities is not close enough. Each community operates independently without forming a learning atmosphere at the community level. overlapping and overlapping functions of relevant departments further result in low efficiency in the use of educational resources, leading to a situation characterized by "small scale and low efficiency" and causing resource waste.

Second, imbalances in the development of digital literacy education for the elderly in wisdom communities are caused by biased planning and coordination in lifelong education. Due to the lack of comprehensive policy frameworks for lifelong education and the lagging research on digital literacy education for the elderly in wisdom communities, it is in a disadvantaged position within the lifelong education system. Firstly, there is insufficient coverage of digital literacy education for the elderly in wisdom communities. Disparities exist between the eastern region and the central and western regions, as well as between urban and rural areas in terms of community education services. While most elderly people are concerned about community affairs and participate in various

recreational activities, they generally lack opportunities for continued learning. Secondly, the current resource allocation for digital literacy education for the elderly in wisdom communities is unreasonable. Limited by the level popularization of lifelong education concepts, the system for digital literacy education for the elderly in wisdom communities has not yet fully formed. The proportions of resource types, educational content, implementation methods, and teaching staff are not harmonious. The quality of online resources varies, and offline learning spaces are not guaranteed. There is also a shortage of dedicated teaching staff.

5. ANALYZING THE COUNTERMEASURES

In order to promote the high-quality development of wisdom communities in the context of Chinese-style modernization, a series of countermeasures and measures need to be taken. Here are some possible strategies and measures:

The first is that, to promote the sustainable development of digital literacy education for the elderly in wisdom communities within the context of lifelong education, it is important to explore sustainable development models and establish research platforms. These platforms aim to enhance digital literacy education for the elderly through the framework of lifelong education, ensuring continuous learning opportunities. Education models should be researched and developed to meet local needs, with a focus on actively exploring new educational ideas, methods, and approaches. Furthermore, it is crucial to establish a policy guarantee system that prioritizes public education services for vulnerable groups and those in need among the elderly in wisdom communities. On the other hand, to achieve the allocation of lifelong education resources and promotion of educational resource flow towards the community, it is essential to establish a smooth mechanism that manages, invests in, and allocates resources effectively. This will foster an open education pattern within the community. Additionally, implementing standardized systems for digital literacy education among the elderly in wisdom communities can enhance their skills and knowledge in this domain. This can be achieved by increasing the proportion of funding for digital literacy education for the elderly.

The second is that, under the context of lifelong education, it is crucial to explore innovative

mechanisms that address digital literacy education for the elderly in wisdom communities. A key step in this process involves tackling the "digital divide" issue, which hinders their integration into the lifelong education system. By prioritizing the resolution of this challenge, people can successfully integrate digital literacy education for the elderly in wisdom communities with the broader lifelong education framework. It is important to strike a balance between humanistic and technological aspects in digital literacy education for the elderly wisdom communities. This includes strengthening user-friendly services for online learning in the community, designing online learning platforms suitable for the elderly, and making online learning interactions an effective extension of offline education. Additionally, it is essential to adhere to the core principles of humanism, focusing on the comprehensive development of the elderly and empowering them as active participants in improving their information literacy, ensuring a continuous and high-quality learning experience for the elderly.

The third is that, the optimization model for digital literacy education for the elderly in wisdom communities, within the context of lifelong education, involves leveraging technologies like big data, cloud computing, and artificial intelligence. These technologies enable the creation of information-based intelligent and wisdom communities. By redefining the concept of wisdom community construction and fully harnessing community educational resources, people can effectively enhance digital literacy education for the elderly. Communities hold rich educational resources, and it is crucial to discover and integrate these resources effectively, which is an important mission endowed by lifelong education to communities. Digital literacy education for the elderly in wisdom communities should seize this development opportunity, utilizing existing community resources such as libraries, senior activity rooms, and conference rooms, to enhance the quantity and quality of courses through resource development and integration.

The fourth is that, it is crucial to establish a collaborative mechanism for digital literacy education for the elderly in smart communities under the background of lifelong education. The government should increase support for digital literacy education for the elderly in smart communities, ensuring basic teaching funds and teaching venues. Communities should effectively improve their service capabilities, establish

sufficient connections with the outside world, facilitate the input of external educational resources, and practice the value concept of lifelong education in serving the elderly. Enhance the effectiveness of learning through modern media such as live streaming, film and television, and audiovisual materials, achieve data collaboration and resource sharing, promote policy, mechanism, and system reform and innovation from the perspective of combining theory with practice, and enhance the effectiveness of smart community construction. Promote joint participation in smart community construction by all sectors of society, establishing cooperation between governments, enterprises, and residents. Through the study of classic cases and statistical data, advantages and weaknesses are explored, forming comparative studies, and further analyzing the guiding and operational forces of digital literacy education for the elderly in smart communities under the background of lifelong education.

The fifth is that, it is important to form a mutually beneficial pattern of development for digital literacy education for the elderly in smart communities. Through government procurement, learning resources required by the elderly in the community can be purchased from cultural departments, educational institutions, profit-making companies, and other units, along corresponding learning services. On the other hand, market-oriented mechanisms can be explored to encourage limited involvement of enterprises in public service supply, providing diversified pathways for participating in digital literacy education for the elderly in smart communities, and communities should also make timely feedback. These measures and initiatives can help promote the high-quality development of lifelong education and enhance the innovative capabilities of digital literacy education for the elderly in smart communities.

6. OUTLOOK FOR THE FUTURE

The research on digital literacy education for the elderly in smart communities under the background of lifelong education has broad prospects:

6.1 In-depth Development of Community Educational Resources

Communities hold rich educational resources, and how to explore and integrate these organic

resources is an important mission given to communities by lifelong education. Digital literacy education for the elderly in smart communities should firmly grasp this development opportunity, utilize existing community resources such as libraries, senior activity rooms, and meeting rooms to enhance the quantity and quality of courses through resource development and integration. By utilizing technologies such as big data, cloud computing, and intelligent systems, smart communities can be built to achieve innovation and development in intelligence and informatization.

6.2 It Is Essential to Redefine the Connotation of Digital Literacy Education for the Elderly in Smart Communities

With community senior schools as the core, featuring senior learning communities, combining teaching and nurturing, and integrating online and offline forms, with a focus on senior volunteer services, a new normal and pattern of digital literacy education for the elderly in smart communities can be formed through interconnectedness. This will provide high-quality educational resources and distinctive activities for a wider range of elderly residents.

In conclusion, research on digital literacy education for the elderly in smart communities under the background of lifelong education requires the construction of innovative smart communities, the creation of learning-oriented smart communities, and the promotion of smart community development to deeply develop community resources for digital literacy education for the elderly.

7. CONCLUSION

The conclusions of the research on digital literacy education for the elderly in smart communities under the background of lifelong education are as follows:

7.1 Attention Should Be Paid to the Learning Demands of Every Elderly Person

In practice, communities should not only understand the overall needs of the elderly but also focus on individual differences. Based on age, cultural level, learning interests, etc., the elderly can be divided into different groups. Targeted

learning resources should be provided according to the actual needs of each group through categorized education. At the same time, cultivating learning leaders among the elderly can be actively done to enable the elderly to lead their peers in learning. This will increase the participation rate of digital literacy education for the elderly in smart communities, and enhance the sense of participation, achievement, and happiness of every elderly person.

7.2 The Structure of Educational Resources in Smart Communities Should Be Optimized

At the curriculum level, precision in senior education service content should be improved, with the principles of "being practical" and "teaching according to needs." By providing educational content with multiple themes, forms, and levels, the quality of life for the elderly can be enhanced. In terms of teaching staff, a mobile form can be adopted to allow them to serve multiple communities. Additionally, professional talents from higher education institutions, relevant educational organizations, and associations within the region can be appointed as community teachers, achieving a balanced match between resources and demands.

Lifelong education emphasizes the universalization of learning, with education needing to be accessible and beneficial for everyone, enhancing inclusiveness and meeting the learning needs of all individuals, especially those from socially disadvantaged groups. This requires people to strengthen policy care and open lifelong education resources to vulnerable elderly groups, and standardize the institutional standards of digital literacy education for the elderly in smart communities. It is necessary to draw lessons from the positive experiences in the development of other educational norms within the lifelong education system. Taking the broad framework of lifelong education as the horizontal axis and the practice of digital literacy education for the elderly in smart communities as the vertical axis, it is also necessary to respect the characteristics and needs of the elderly and move from standardization to sustainable development.

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REFERENCES

- D. (2022).[1] Gao, Difficulties and Breakthroughs in the **High-Quality** Development of Elderly Community Education under the Background of Lifelong Education. Jiangsu Vocational Education, 22(2), 28-35.
- [2] Liu, Y., & Zhang, X. (2023). Research on the Digital Transformation of Elderly Education under the Background of Lifelong Learning. Heihe Journal, (4), 114-119.
- [3] Hu, Y., Luo, J., & Gong, R. (2023). Socioeconomic Status, Digital Literacy, Intergenerational Support, and the Willingness to Pay for Smart Elderly Care in Communities: The Mediating Role of Moderation. Chinese Health Resources Management, 40(7), 494-499, 535.
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- [6]